

CI, 1.65–12.81) were associated with a significantly higher risk of cardiovascular mortality.

Conclusion: In CAPD patients, overweight was associated with uncontrolled BP and uncontrolled SBP, and uncontrolled SBP was associated with an increased risk of cardiovascular mortality. Patients with concurrent underweight and uncontrolled BP, as well as underweight and uncontrolled SBP had significantly higher risk of cardiovascular mortality.

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0141

Impact of Type D Personality on Quality of Life in CAPD Patients

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Objective: Type D personality is a stable and powerful predictor of impaired quality of life and poor health outcomes in various patient groups and healthy individuals. We attempted to assess the relationships among Type D personality, illness perception, social support and depression, and investigate the impact of Type D personality on quality of life (QOL) in continuous ambulatory peritoneal dialysis (CAPD) patients.

Methods: The demographic information, clinical data and laboratory findings in CAPD patients in our PD center from September, 2012 to September, 2013 were collected. Type D personality was assessed by the Chinese 14-item Type D Personality Scale (DS14). Patients' illness perception, social support, depression, and QOL were assessed by using the Brief Illness Perception Questionnaire (Brief IPQ), social support rating scale (SSRS), Beck Depression Inventory (BDI), and Short Form 36 (SF-36), respectively.

Results: Of the 385 CAPD patients investigated, 137 (35.6%) patients had a Type D Personality (Type Ds). Type Ds believed their illness had much more serious consequences (7.67 ± 2.64 vs. 6.27 ± 3.45 , $P < 0.001$), and experience much more symptoms that they attributed to their illness (7.11 ± 3.58 vs. 5.93 ± 2.59 , $P = 0.023$). Significant differences were found between Type Ds and non-Type Ds in QOL (395.2 ± 130.34 vs. 489.6 ± 148.38 , $P < 0.001$), social support (21.7 ± 5.42 vs. 24.93 ± 5.83 , $P < 0.001$), and depression (22.9% vs. 20.4% , $P < 0.001$). The correlation analysis demonstrated that Type D was positively associated with depression ($r = 0.384$, $P < 0.01$), while negatively associated with SF-36 score ($r = -0.301$, $P < 0.01$), and social support ($r = -0.254$, $P < 0.01$). Using multiple linear regression analysis, we found that Type D personality ($\beta = -82.554$, $P < 0.001$) was independently associated with SF-36 score.

Conclusion: Type D personality was a predictor of poor QOL in PD patients. Our results suggest that intervention for Type Ds may benefit CAPD patients in terms of QOL improvement.

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0143

miR-200a Negatively Regulates TGF- β 1-induced Peritoneal Mesothelial Cell Epithelial-Mesenchymal Transition by Targeting ZEB1 and ZEB2 Expression

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Background: Peritoneal fibrosis (PF) is an almost invariable consequence of peritoneal dialysis (PD), which is an established alternative for the replacement therapy of end-stage renal disease. In our previous study, we found that the expression level of miR-200a were down-regulated in fibrotic peritoneum and the epithelial-mesenchymal transition (EMT) process of peritoneal mesothelial cell. However, the role of miR-200a in EMT of peritoneal mesothelial cell and peritoneal fibrosis is largely unknown.

Methods: Human peritoneal mesothelial cell line (HMrSV5) was cultured in the presence or absence of TGF- β 1. The protein expression levels of EMT

index and E-box-binding homeobox (ZEB) 1/2 were determined by western blot. The level of miR-200a was determined by real-time PCR. miR-200a mimic or inhibitor and its negative control RNA, were transfected into HMrSV5 cells using Lipofectamine 2000.

Results: We found that miR-200a mimic can attenuate TGF- β 1 induced peritoneal mesothelial cell EMT and synthesis of extracellular matrix. It was also demonstrated that the miR-200a was responsible for protecting peritoneal mesothelial cells from mesenchymal transition by targeting suppression of ZEB1/2.

Conclusion: The results suggested that miR-200a may not only be a useful biomarker of EMT in ovarian cancer, but also of potential therapeutic value in peritoneal fibrosis.

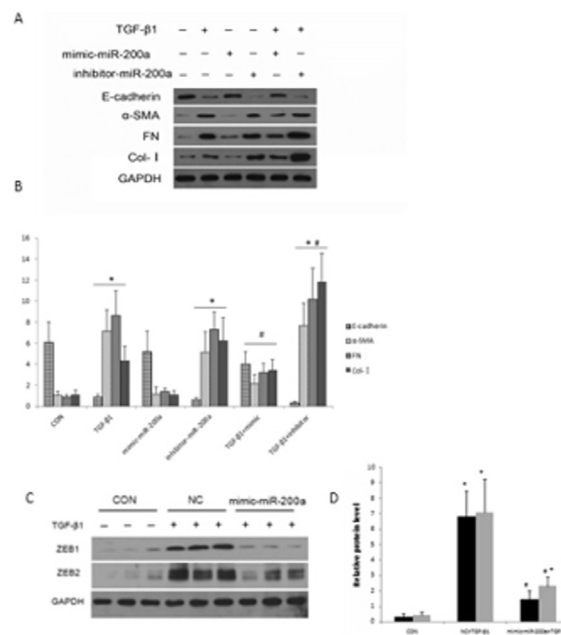


Fig. 1 A–B: EMT index expression after transfection of miR-200a mimic or inhibitor. **C–D:** ZEB1/2 expression after transfection of miR-200a mimic. * $P < 0.5$, # $P < 0.01$.

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0144

Expression of miRNA200a in Peritoneal Dialysis-associated Peritoneal Fibrosis

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Background: Peritoneal fibrosis (PF) is an almost invariable consequence of peritoneal dialysis (PD), which is an established alternative for the replacement therapy of end-stage renal disease. We know that miR-200a belong to miR-200 family, which is closely related to a variety of fibrotic diseases. However, the role of miR-200a in peritoneal fibrosis is largely unknown.

Methods: The peritoneal fibrosis mouse model associated with PD was established by intraperitoneal injection of lipopolysaccharide + 4.25% peritoneal dialysate. The expression of miRNA was detected by microarray. The expression of miRNA profiles between fibrotic and normal peritoneal tissues was compared ($n = 3$ in each group). The differentially expressed miRNA (miR-200a) was validated by real-time PCR in larger sample size cohorts ($n = 15$). The expressions of miR-200a were also detected in the epithelial-mesenchymal transition (EMT) process of peritoneal mesothelium cells.

Results: In mice model of PD, peritoneal tissue was markedly thickened and with a massive extracellular matrix accumulation. By miRNA microarray analysis, miR-200a was significantly down regulated (3.31 folds change,